PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Protect Bear Valley Wild Salmon, Steelhead, Bull Trout Spawning Habitat

BPA project number: 20032
Contract renewal date (mm/yyyy): ☐ **Multiple actions?**

Business name of agency, institution or organization requesting funding
Shoshone Bannock-Tribes and Idaho Department of Fish and Game

Business acronym (if appropriate) SBT & IDFG

Proposal contact person or principal investigator:

Name	Scott Grunder
Mailing Address	Idaho Department of Fish and Game, 3101 S. Powerline Road
City, ST Zip	Nampa, ID 83686
Phone	(208) 465-8465
Fax	(208) 465-8467
Email address	sgrunder@idfg.state.id.us

NPPC Program Measure Number(s) which this project addresses
2.1; 2.2A; 4.1; 7.6; 7.6A; 7.6A.2; 7.6B.1; 7.6B.2; 7.6B.3; 7.6B.4; 7.6B.5; 7.6C; 7.6C.5; 7.8A.2; 7.8A.3; 7.8A.4; 7.8A.5; 7.8B.1; 7.8D.1; 7.8E.1; 7.8E.2

FWS/NMFS Biological Opinion Number(s) which this project addresses
Oct 30, 1996 Elk Creek Grazing Allotment BO,1993 Bear Valley Basin BO, 1998 Steelhead BO, 1998 Bull Trout BO,

Other planning document references
Proposed Recovery Plan for Snake River Salmon, Tasks 1.1.b; 1.1.b.2; 1.1.b.3. CBFWA FY99 DAIWP Salmon Subbasin Objectives 1 - 4.; Boise N.F. Plan; PACFISH; INFISH; IDFG Anadromous & Resident Fish Plans; IDFG Elk Plan; IDFG Furbearer Plan; IDFG Nongame Species Plan, Bear Valley Creek Key Watershed Bull Trout Problem Assessment (draft)

Short description
Protect critical spawning, rearing and migratory habitats for wild chinook salmon, steelhead trout, bull trout and westslope cutthroat trout in the Elk Creek portion of the Bear Valley Basin by permanently closing the allotment to livestock grazing.

Target species
Wild spring/summer chinook salmon, steelhead trout, bull trout, westslope cutthroat trout, and other riparian habitat dependent species.

Section 2. Sorting and evaluation

Subbasin
Salmon River

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
☒ Anadromous fish ☐ Resident fish ☐ Wildlife	☐ Multi-year (milestone-based evaluation) ☒ Watershed project evaluation	☐ Watershed councils/model watersheds ☐ Information dissemination ☐ Operation & maintenance ☐ New construction ☐ Research & monitoring ☒ Implementation & management ☐ Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
9405000	Salmon River Habitat Enhancement (SRHE) M&E	The SRHE project will provide monitoring of the grazing allotment in conjunction with USFS personnel following permanent closure of allotment to grazing.

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Increase chinook salmon and steelhead trout to help meet the Council's objective of doubling the run size without loss of biological diversity and protect and enhance habitat for bull trout and westslope cutthroat trout and other riparian dependent spp.	a	Permanently eliminate livestock grazing impacts on the Elk Creek Allotment in the Bear Valley Creek watershed.
1		b	base property and grazing permit appraisal associated with the Elk Creek Allotment
1		c	purchase of base property and grazing permit
1		d	permittees waive permits back to Government
1		e	implement NEPA action with closing allotment to grazing as the proposed action
1		f	implement decision modifying Forest Plan and permanently closing allotment to grazing
1		g	sell base property back to permittees (base property is located on Snake River desert near Boise, Idaho. It has no significant fish or wildlife habitat. IDFG and SBT have no interest in long-term ownership of

			this property.)
1		h	continue long-term monitoring (funding contributed by USFS, SBT, and IDFG)
2	Increase chinook salmon adult numbers from 50 to 2000 in the Bear Valley Basin	a	same as tasks a-h in objective 1
3	Increase chinook salmon egg to parr survival from 0.8% to 5.0% in the Elk Cr. System	a	same as tasks a-h in objective 1
4	Decrease spawning substrate fine sediment in Elk Creek system from 45% to 30%	a	same as tasks a-h in objective 1
5	Increase bank stability in Elk Creek system from 53% to 80% (PACFISH standard)	a	same as tasks a-h in objective 1

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	10/1999	10/2010	Increase chinook salmon and steelhead trout to help meet the Council's objective of doubling the run size without loss of biological diversity and protect and enhance habitat for bull trout and westslope cutthroat trout and other riparian dependent spp.	X	100.00%
2	10/1999	10/2010	Increase chinook salmon adult numbers from 50 to 2000 in the Bear Valley Basin	X	
3	10/1999	10/2010	Increase chinook salmon egg to parr survival from 0.8% to 5.0% in the Elk Cr. System	X	
4	10/1999	10/2010	Decrease spawning substrate fine sediment in Elk Creek system from 45% to 30%	X	

5	10/1999	10/2010	Increase bank stability in Elk Creek system from 53% to 80% (PACFISH standard)	X	
				Total	100.00%

Schedule constraints
Completion of appraisal and the schedule could be constrained if NEPA decision is appealed or litigated.

Completion date
09/2000

Section 5. Budget

FY99 project budget (BPA obligated):

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel			
Fringe benefits			
Supplies, materials, non-expendable property			
Operations & maintenance			
Capital acquisitions or improvements (e.g. land, buildings, major equip.)	Estimated value of grazing permit is $406 per cow/calf pair	%96	300,000
NEPA costs	NEPA costs will be contributed by Forest Service		
Construction-related support			
PIT tags	# of tags:		
Travel			
Indirect costs			
Subcontractor	Appraisal of grazing permit by BPA	%3	10000
Other			
TOTAL BPA FY2000 BUDGET REQUEST			$310,000

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount ($)
FS	NEPA	%16	75,000
FS	Riparian and Aquatic Habitat and Grazing Monitoring	%9	40,000
IDFG	Redd Counts & Parr Density Monitoring	%0	2000
SBT	Parr and Habitat Monitoring and redd counts	%0	3000
SBT	Contributed time.	%0	3000
IDFG	Contributed time.	%1	5,000
USFS	Contributed time.	%1	5,000
Total project cost (including BPA portion)			$443,000

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget				

Section 6. References

Watershed?	Reference
☐	U.S. Government, Federal Register. (57 FR 14653). Listing of Snake River fall chinook and Salmon River spring/summer chinook salmon as threatened. April 22, 1992. Washington, D.C., 57:14653.
☐	National Marine Fisheries Service (NMFS). 1995. Proposed recovery plan for Snake River Salmon. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, NMFS, Washington, D.C.
☐	Northwest Power Planning Council (NPPC). 1994. 1994 Columbia River Basin fish and wildlife program. NPPC, Portland, Oregon.
☒	Burton, T.A., W.J.Ririe, J.Erickson, and M.Miller. 1998. 5-Year Monitoring Report for Bear Valley Stream and Riparian Habitats. Boise National Forest, Boise, Idaho.
☒	National Marine Fisheries Service (NMFS). 1996. Biological Opinion Elk Grazing Allotment. NMFS, NW Region, Seattle, Washington.
☒	National Marine Fisheries Service (NMFS). 1993. Biological Opinion Annual Management Plans Bear Valley and Elk Creek Cattle and Horse Allotments. NMFS, NW Region, Seattle, Washington.
☒	NMFS. 1998. Biological Opinion Land and Resource Management Plans for

	National Forest and Bureau of Land Management Resource Areas in the Upper Columbia River Basin and Snake River Basin Evolutionarily Significant Units. NMFS NW Reg., Seattle, WA.
☒	Burton, T.A. 1992. Upper Bear Valley Creek Fisheries: An Assessment for the Bear Valley Creek Allotment Plan. Boise National Forest, Boise, Idaho.
☒	Lamansky, J.A. and S.A. Grunder. 1998. Bear Valley Creek Key Watersheds Bull Trout Problem Assessment. Southwest Basin Native Fish Watershed Advisory Group. Boise, Idaho.
☐	USDA Forest Service. 1995. Inland Native Fish Strategy (INFISH). Intermountain, Northern and Pacific Northwest Regions, USFS, Ogden, Utah.
☐	USDA Forest Service and USDI Bureau of Land Management. 1994. Implementation of Interim Strategies for Managing Anadromous Fish-producing Watersheds in Easter Oregon and Washington, Idaho, and Portions of California (PACFISH).USFS, Washington D.C.
☒	Boise National Forest. 1990. Land and Resource Management Plan for the Boise National Forest. USFS, Boise, Idaho.
☐	Idaho Dept. of Fish and Game (IDFG). 1992. IDFG Anadromous Fish Management Plan 1992 - 1996. IDFG, Boise, Idaho.
☐	Idaho Dept. of Fish and Game (IDFG). 1991. IDFG Elk ManagementPlan 1991 - 1995. IDFG, Boise, Idaho.
☐	Idaho Dept. of Fish and Game (IDFG). 1990. IDFG Furbearer Management Plan 1991 - 1995. IDFG, Boise, Idaho.
☐	Idaho Dept. of Fish and Game (IDFG). 1991. IDFG Nongame and Endangered Wildlife Management Plan 1991 - 1995. IDFG, Boise, Idaho.
☐	Idaho Dept. of Fish and Game (IDFG). 1996. IDFG Fisheries Management Plan 1996 - 2000. Federal Aid in Sports Fish Restoration, Boise, Idaho.
☐	National Marine Fisheries Service (NMFS). 1996. Listed Specis, Critical Habitat, Biological Requirements, and Status Under Environmental Baseline in 1995. NMFS NW Region, Seattle, Washington.
☐	U.S. Fish and Wildlife Service (USFWS). 1998. Biological Opinion for the effects to bull trout from continued implementation of Land and Resource Management Plans and Resource Management Plans as amended by INFISH and PACFISH. USFWS, Portland, Oregon

PART II - NARRATIVE

Section 7. Abstract

The Elk Creek Allotment covers approximately 48,000 acres of National Forest System Lands in the Bear Valley Basin. Elk Creek accounts for approximately one third of the production of wild chinook salmon in the Middle Fork Salmon River metapopulation. The overall goal of the project is to protect critical spawning, rearing and migratory habitats for wild spring/summer chinook salmon, steelhead trout, bull trout and westslope

cutthroat trout in the Elk Creek portion of the Bear Valley Basin by compensating current permittees for their grazing permits and permanently closing the Elk Creek Allotment to grazing. This project addresses several sections of the CBFWP specifically dealing with native fish and wildlife species and habitat. The primary benefits of the project will be for protection and recovery of wild spring/summer chinook salmon, steelhead trout, bull trout, westslope cutthroat trout and their habitat. Removal or exclusion of livestock grazing from riparian systems has been shown to be an effective method to improve riparian and aquatic habitats which have been degraded in part by historic grazing (Burton, et al. 1998). The project will result in increasing chinook salmon and adult numbers from 50 to 2000 in the Bear Valley Basin; increasing chinook salmon egg to parr survival from 0.8% to 5.0% in the Elk Cr. system; decreasing spawning substrate fine sediment in Elk Creek system from 45% to 30%; and increasing bank stability in Elk Creek system from 53% to 80%. Habitat objectives should be accomplished by 2010. The time frame for achievement of the population objective for chinook salmon may be influenced by out-of-basin factors. Ongoing monitoring activities being conducted by IDFG, SBT and USFS will continue to be used to evaluate the success of the project.

Section 8. Project description

a. Technical and/or scientific background

The Elk Creek Cattle Allotment includes approximately 48,000 acres of land in the Elk Creek drainage of the Bear Valley Basin in Central Idaho. The majority of this land lies within the Frank Church River-of-No-Return Wilderness and constitutes part of the headwaters to the Middle Fork of the Salmon River. The Bear Valley Basin supports an extremely important native spring/summer chinook salmon run. The Bear Valley population comprises part of the Middle Fork Salmon River metapopulation, one of eleven metapopulations comprising the range of the listed chinook salmon. Elk Creek provides a major component of the spawning habitat in the Bear Valley Basin for steelhead trout and chinook salmon. Elk Creek constitutes approximately one third of the production of chinook salmon in the Middle Fork Salmon River metapopulation (NMFS, 1996). Additionally, the tributaries to Elk Creek within the allotment also support populations of bull trout and westslope cutthroat trout.

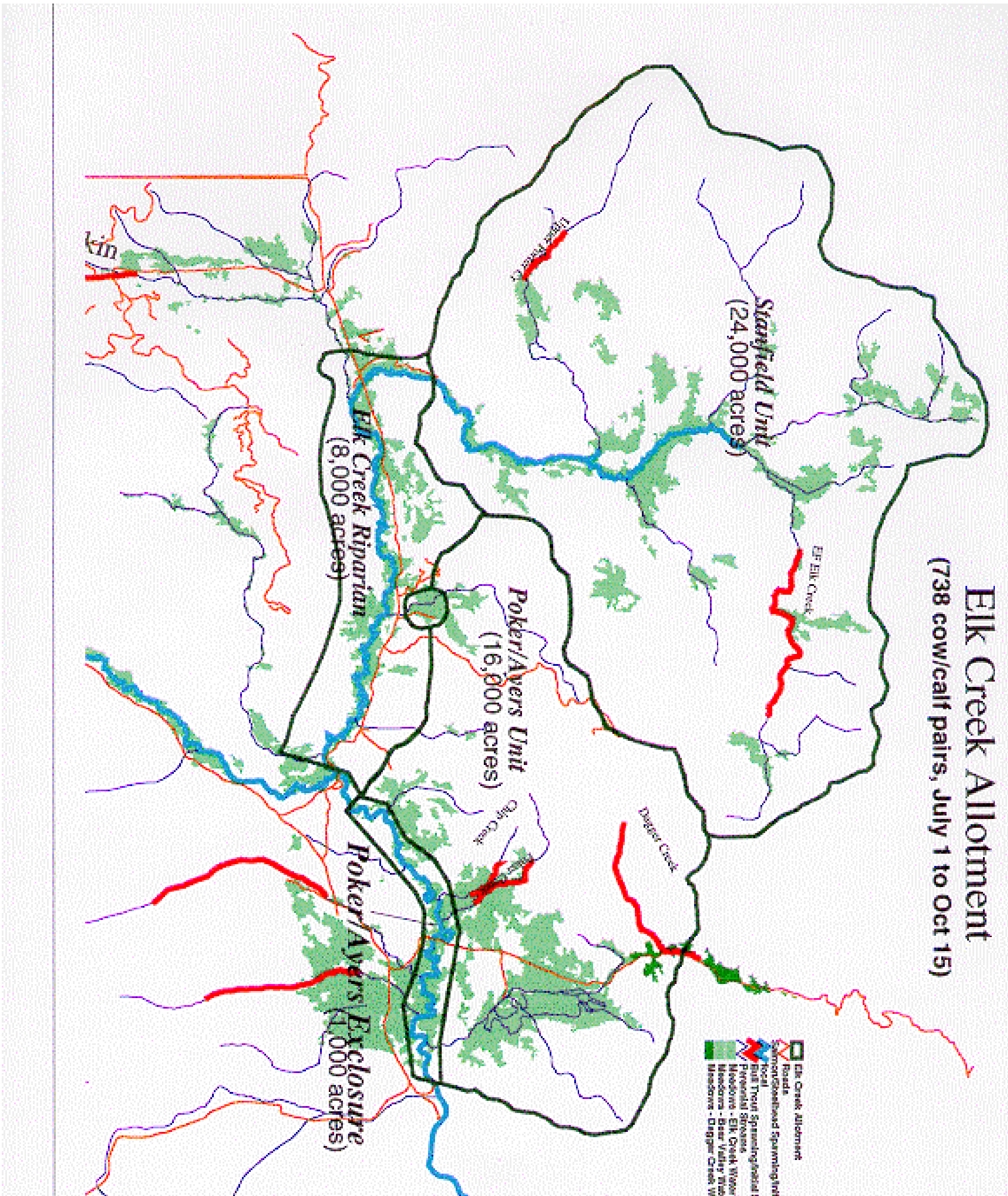
Livestock have grazed this area since before the establishment of National Forest Reserves. Currently one ranch operation (two grazing permits) is authorized to graze 738 cow/calf pairs on the Allotment during the grazing season from July 1 to October 15. While tributaries to Elk Creek are in generally near natural condition relative to habitat parameters (bank stability, width/depth, % fines, riparian vegetation, etc.), the mainstem of Elk Creek where anadromous spawning occurs exhibits significant detrimental effects from livestock grazing (Burton, et al. 1998). The problem is that livestock grazing contributes to adverse habitat conditions, particularly those related to streambank stability and substrate sediment(Boise National Forest, 1992). The biological requirements of chinook salmon are not currently being met. Any further degradation would have a significant impact due to the amount of risk salmon presently face under the environmental

baseline (NMFS, 1996). Summary of monitoring data completed in 1998 indicates streambank stability averages 59 percent and substrate fines averages 57 to 60 percent in the Elk Creek system (Burton, et al. 1998). This has resulted in extremely low egg-to-parr for chinook salmon survival of 0.8% as compared to 6.0% in nonimpacted habitats (Burton, 1992).

Prior to the listing of chinook salmon under the Endangered Species Act (ESA), the Boise National Forest and the grazing permittees began implementing management changes to reduce grazing conflicts and improve fisheries habitat. With the listing of chinook salmon, further changes were implemented under a biological opinion (BO) issued in 1993 (NMFS, 1993). In 1996, a second BO was issued (NMFS, 1996) which determined that the additional changes in grazing management were not sufficient to protect chinook salmon or their habitat. The proposed grazing was determined "likely to jeopardize the continued existence of Snake River spring/summer Chinook salmon and cause adverse modification of the species' critical habitat" (NMFS, 1996). The BO included three reasonable and prudent alternatives for management. Alternative 1, Intensive Management with some Fencing, has been followed since issuance of the BO.

The most significant area of concern for grazing impacts has focused on the Stanfield grazing unit (see attached map). This unit or pasture includes over 40% of the grazing forage on the allotment. It also includes the most significant portion of the spawning habitat for chinook salmon. The rest of the spawning habitat is protected by riparian pastures or grazing exclosures. This alternative allows for the construction of riparian area fencing to eliminate grazing impacts. However, the costs and problems of building appropriate amounts of fence inside designated wilderness accompanied with increased monitoring requirements and reduced allowable grazing in the unit makes it economically undesirable and controversial. Consequently, the Stanfield Unit has not been grazed during the last two years, placing extreme grazing pressure on the Poker/Ayers Unit. The restrictions on grazing the Stanfield pasture have also interrupted the rotation grazing program on the allotment needed to maintain good ecosystem health on the uplands and tributaries.

To resolve these problems, the Boise National Forest has agreed to work with the fish and wildlife managers of the Shoshone-Bannock Tribes, NMFS and IDFG to protect chinook redds, and improve riparian and aquatic habitat conditions for salmon, steelhead, bull trout and westslope cutthroat trout and other riparian dependent species by eliminating livestock grazing conflicts. This proposal will result in the permanent closure of the entire Elk Creek Allotment to livestock grazing. The fish and wildlife managers and the Forest Service are committed to cooperative long-term monitoring of the results of implementing the proposal.


Elk Creek Allotment
(738 cow/calf pairs, July 1 to Oct 15)
Stanfield Unit
(24,000 acres)
Elk Creek Riparian
(8,000 acres)
Poker/Ayers Unit
(16,000 acres)
Poker/Ayers Exclosure
(1,000 acres)
EF Elk Creek
Dagger Creek

b. Rationale and significance to Regional Programs

This proposal contributes to meeting the Fish and Wildlife Program (FWP) goal (4.1) to double the salmon and steelhead runs without loss of biological diversity (NPPC, 1994) This is also consistent with the Biological of the National Marine Fisheries Service recovery escapement goal of 968 chinook for the Bear Valley Basin (NMFS, 1996). Permanent removal of livestock grazing impacts will allow restoration of highly productive spawning and rearing habitats and significantly increase egg to parr survival from 0.8% to 6.0% contributing to the accomplishment of these goals. This proposal would also benefit bull trout and westslope cutthroat trout and help restore biological diversity.

This project directly addresses the goals and several measures of the Columbia River Basin Fish and Wildlife Program (NPPC 1994). The project addresses the systemwide goal of a healthy Columbia River basin (Section 2.1), supporting the long-term sustainability of native fish and wildlife species by permanently removing the impacts of livestock grazing on over 48,000 acres in the Bear Valley Creek watershed. Also, the project addresses measure 2.2A by protecting fish and wildlife habitat, supporting weak stocks of native fish and wildlife species (chinook salmon, steelhead, bull trout, westslope cutthroat trout, lynx, wolf, furbearers, and nongame riparian dependent species).

Section 7.6 of the Columbia River Basin Fish and Wildlife Program (NPPC 1994) recognizes that improvements in habitat quality are needed in order to increase the productivity of many stocks. By permanently removing the influence of grazing from the Elk Creek Allotment, this project will have a positive influence on the habitat quality of Elk Creek, designated in 1992 as critical habitat for the recovery of Snake River spring/summer chinook salmon (57 FR 14653), and the major tributary to Bear Valley Creek. Section 7.6 also calls for watershed restoration to be cooperatively undertaken by Federal, State, Private, and Tribal parties. This project is jointly sponsored by the Shoshone-Bannock Tribes and the Idaho Department of Fish and Game, and involves the cooperation of the USFS and the current permittees of the Elk Creek Allotment. This project will also provide riparian and upslope protection throughout the Elk Creek Allotment, and will provide long-term benefits to fish and wildlife resources throughout the Bear Valley Creek watershed.

This project directly addresses the Habitat Goal in Section 7.6A by protecting and improving habitat conditions, ensuring compatibility with the biological needs of salmon, steelhead, and other fish and wildlife species throughout the Elk Creek Allotment. The project also addresses Measure 7.6A.2 by maintaining the present quantity and productivity of salmon and steelhead habitat, as well as improving the productivity of salmon and steelhead habitat critical to the recovery of weak stocks.

Measure 7.6B.1 calls for coordination of land and water activities to protect and improve the productivity of salmon and steelhead stocks, and encourages proactive participation by private parties. This project will involve the coordination of land and water activities and will involve the active participation of private interests with the Elk Creek Allotment.

Measure 7.6B.2 calls for the implementation of procedures to ensure compatibility and compliance with the NPPC's habitat goal, policies, and objectives. By permanently removing the influence of livestock grazing on over 48,000 acres in the Elk Creek Allotment, this project will directly address the Council's habitat goals, policies, and objectives. By providing habitat protection and improvement in the Bear Valley Creek watershed, this project directly addresses Measure 7.6B.3. Measure 7.6B.4 gives priority to actions that maximize the result per dollar spent. This project will require funding for only one year, and the benefits to fish and wildlife species from a healthy riparian zone are numerous and long lasting. Measure 7.6B.5 calls for cost and effort sharing, and as previously stated, this project is a collaboration between Federal, State, Tribal, and Private entities.

Section 7.6C calls for Federal, State, and others with ownership and/or management responsibilities to accelerate efforts to restore the health of affected salmonid habitat. By permanently closing the Elk Creek Allotment to grazing, this project will do just that. The Watershed Management section of 7.6C also calls for habitat interventions that will restore and employ natural healing mechanisms whenever possible, and by removing grazing impacts and allowing natural processes to operate, this project directly addresses this concept. Measure 7.6C.5 calls for management agencies to manage activities to restore and maintain the quality and quantity of existing habitat, as well as managing riparian and floodplain areas to promote the protection and re-establishment of natural ecological functions. Again, by permanently removing livestock grazing from the Elk Creek Allotment, this project will allow natural processes to occur without the influence of domesticated livestock.

Section 7.8 of the Fish and Wildlife Program calls for the implementation of Federal, State, and Tribal habitat improvements, and Measure 7.8A.2 calls for the initiation of actions needed for recovery when water quality and/or Federal land management plan objectives are not being met. Over 40% of the Elk Creek Allotment currently does not meet the desired USFS objectives, and by permanently removing livestock grazing from this allotment, the USFS objectives for healthy riparian and upslope conditions can be met. Measure 7.8A.3 calls for amending existing land management plans to incorporate the Council's habitat goal, policy, and objectives, and after the transfer of the Elk Creek Allotment to the USFS, the Boise National Forest Plan will be amended to close this allotment to grazing in perpetuity. This project also directly addresses Measure 7.8A.4, as the project will ensure that land management activities are consistent with and will not undermine the benefits of any project implemented through the NPPC. This project will also address Measure 7.8A.5 by improving livestock management in the Elk Creek Allotment by permanently removing livestock grazing from the allotment.

Measure 7.8B.1 calls for the establishment of best management practices to improve salmon and steelhead production. This project will provide management for the Elk Creek Allotment which meets the Council's habitat goal, policies, and objectives. Measure 7.8D.1 calls for the protection of riparian and underwater lands associated with perennial and intermittent streams contributing to anadromous and resident fish production. Elk

Creek is a major tributary to Bear Valley Creek, and provides much of the production for wild chinook salmon and steelhead in the Middle Fork Salmon River drainage. By permanently removing the influence of livestock grazing, the riparian areas in the Elk Creek Allotment will be protected.

Measure 7.8E.1 calls for the implementation of land exchanges, purchases, or easements of a sufficient width to improve and maintain salmon and steelhead production, with full compensation of landowners. In this case, physical property is not being purchased, but a private individual is being compensated for giving up his grazing rights associated with the Elk Creek Allotment. Measure 7.8E.2 calls for the BPA to provide funding for the acquisition and management of permanent conservation easements for rebuilding and maintaining salmon and steelhead populations, and following the transfer of the grazing lease, the USFS will forever close the Elk Creek Allotment to livestock grazing.

This project also directly addresses several tasks in the Proposed Recovery Plan for Snake River Salmon (NMFS 1995). Task 1.1.b, 1.1.b.2, and 1.1.b.3 call for the protection of important habitat on Federal lands, protecting riparian activities from activities that would cause degradation, and protecting watersheds that contain or support both high quality habitat and habitat that can be readily restored. This project directly addresses these tasks by protecting riparian habitat and watersheds on Federal lands containing high quality habitat and habitat that can be readily restored by removing the influence of livestock grazing from the Elk Creek Allotment.

The project also supports the goals and direction established in the 1993 and 1996 Biological Opinions for chinook salmon, 1998 Biological Opinion for steelhead, 1998 Biological Opinion for bull trout, Bear Valley Creek Key Watershed Bull Trout Problem Assessment, Boise National Forest Land and Resource Management Plan as amended by PACFISH and INFISH, IDFG 1996-2000 Anadromous and Resident Fish Management Plans, IDFG Elk Management Plan, IDFG Furbearer Management Plan, and IDFG Nongame Species Management Plan. All of these plans include goals for improving riparian habitat, aquatic habitat, water quality and improving population status for numerous species. The project will significantly improve the health of the aquatic and riparian ecosystems which are key to meeting these goals.

c. Relationships to other projects

The Salmon River Habitat Enhancement M&E (SRHE) project (BPA Project No. 9405000) has as one of it's objectives to decrease both surface and subsurface streambed sediment in Bear Valley Creek, and a task to work with the USFS and others to eliminate all human activities which result in extraordinary amounts of sediment input into Bear Valley Creek. Following the transfer of the grazing permits to the USFS and subsequent modification of the Forest Plan to permanently close the Elk Creek Allotment to livestock grazing, the SRHE project, along with the USFS and IDFG, will provide monitoring of the allotment to ensure compliance with the modified Forest Plan.

d. Project history (for ongoing projects)

N/A

e. Proposal objectives

1. Increase chinook salmon and steelhead trout to help meet the Council's objective of doubling the run size without loss of biological diversity and protect and enhance habitat for bull trout and westslope cutthroat trout and other riparian dependent species.
2. Increase chinook salmon adult numbers from 50 to 2000 in the Bear Valley Basin.
3. Increase chinook salmon egg-to -par survival from 0.8% to 5.0% in the Elk Cr. System.
4. Decrease spawning substrate fine sediment in Elk Creek system from 45% to 30%.
5. Increase bank stability in Elk Creek system from 53% to 80% (PACFISH standard).

Products from this project will include permanently removing livestock grazing impacts from approximately 48,000 acres of National Forest System lands; increasing chinook salmon adult numbers from 50 to 2000 in the Bear Valley Basin; increasing chinook salmon egg-to-parr survival from 0.8% to 5.0% in the Elk Cr. System; decreasing spawning substrate fine sediment in Elk Creek system from 45% to 30%; and increasing bank stability in Elk Creek system from 53% to 80%.

f. Methods

The methods for this project will involve permanently removing livestock grazing impacts to riparian, aquatic, and upland habitats on the Elk Creek Allotment. The actions needed to do this include: an appraisal of the grazing permits by the BPA, compensation provided to the current permittees for grazing permits, execution of a NEPA process to modify the Boise National Forest Plan to permanently close the Elk Creek Allotment to livestock grazing, and continued monitoring to evaluate accomplishment of objectives. Permanently closing the Elk Creek Allotment to grazing will lead to accomplishment of objectives 1 - 5. Results expected from this project are healthy, properly functioning riparian and aquatic ecosystems returning quickly to near natural condition with numerous benefits to fish and wildlife species.

Critical Assumption. Permanently removing livestock grazing permanently from the Elk Creek Allotment will result in improved riparian and aquatic habitat and specifically result in increasing egg to parr survival. Even with improved egg-to-parr survival, many out of basin factors will effect the ultimate success of this project for anadromous species. The primary limiting factor is low smolt and adult survival through the lower Snake River hydropower system.

g. Facilities and equipment

No major facilities or equipment are necessary for the project.

h. Budget

Current estimates of permit value support a $406 approximate value per cow/calf pair for 738 pair permitted on the Elk Creek Allotment ($300,000). BPA estimates that the appraisal costs would be approximately $10,000. This is an approximate total of $310,000. The actual value will be dependent on the appraisal.

Section 9. Key personnel

This project will not involve BPA funds for personnel. All personnel costs will be contributed by the agencies involved (approximately $13,000).
Key project personnel include: USFS - Warren Ririe, Tim Burton, Walt Rogers; IDFG - Scott Grunder; SBT - Jeff Anderson. The principal investigator is Scott Grunder, IDFG whose resume follows.

Scott A. Grunder

6201 North Drake Way
Garden City, Idaho 83714

Employment

IDAHO DEPARTMENT OF FISH AND GAME; LOCATION: NAMPA, IDAHO
Environmental Staff Biologist, November 1991 to Present

Responsibilities: Review, coordinate, and develop official Department comments on proposed projects and actions that have potential impacts on fish and wildlife habitats and wildlife-related recreation (e.g., hydropower, water rights, timber sales, mining, grazing, urban development); provide on-site review of proposed projects with other review agencies and proponents; coordinate regional fish and wildlife habitat issues with Department management staff; serve as regional Department liaison with other agencies/entities in land and water management issues; participate in numerous interagency committees and work groups related to water quality , water management, and fish and wildlife issues; co-facilitate citizen-based committee designed to implement State of Idaho Bull Trout Conservation Plan; explain Department policies and concerns to various groups, agency representatives, and elected officials; testify at administrative hearings or meetings of elected officials on various issues potentially affecting fish and wildlife; write annual reports and/or other technical reports as needed; and collect population and habitat data as necessary to evaluate effects of proposed actions or proposals.

IDAHO DEPARTMENT OF FISH AND GAME; LOCATIONS: JEROME, MCCALL, AND GARDEN CITY/NAMPA
Regional Fishery Biologist, October 1985 to November 1991

Responsibilities: Assess resident and anadromous fish population status in regional waters using a variety of sampling gear and methods such as electrofishing, netting, redd counts, creel survey, and direct observation; collect site-specific fish habitat and physical habitat data; collect limnological data from regional waters; data summarization and analysis; writing annual job performance reports and other technical reports as needed; assist with fish population renovation using piscicides; assist with the development of annual work plans, fish management plans, public meetings, fishing regulations, fish stocking plans, and management plans for individual water bodies; review, coordinate, and develop comments on proposed projects and actions that had potential effects on fish habitat and angling; assist with fish habitat improvement projects; assist with development of fish management budgets and supervision of temporary employees; maintain inventory of equipment; and interact with other agencies and entities on fish management, population, and habitat issues.

IDAHO DEPARTMENT OF FISH AND GAME; LOCATIONS: HENRYS LAKE, JEROME , AND ELLIS,IDAHO
Fishery Technician & Biological Aide, May-October 1985; July-December 1984; & April-May 1984, respectively

Responsibilities: Conduct intensive creel surveys and angler interviews at Henrys Lake and Hagerman Wildlife Management Area; assess fish population status in regional waters using a variety of sampling gear and methods; collect limnological data; data summarization and analysis; wrote job performance reports; assist with sorting, collecting, and spawn take operations at the Henrys Lake and Pahsimeroi Fish Hatcheries; and assist with stocking of resident and anadromous fish.

WYOMING GAME AND FISH DEPARTMENT; LOCATION: BUFFALO, WYOMING
Biological Aide, May-September 1981

Responsibilities: Assist fish management staff with assessing fish population status in northeastern Wyoming waters using a variety of sampling methods; data summarization; stocked trout fingerlings in area streams; and equipment maintenance.

SOUTH DAKOTA STATE UNIVERSITY; LOCATION: BROOKINGS, SOUTH DAKOTA
Biological Aide, June-August 1980
Responsibilities: Assisted with assessments of fish population status in small impoundments across South Dakota using electrofishing and other sampling gear; data summarization; and equipment maintenance.

SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS; LOCATION: SIOUX FALLS, SOUTH DAKOTA
Conservation Maintenance Worker, June-August 1979

Responsibilities: Assisted with assessments of fish population status in southeastern South Dakota lakes using a variety of nets; stocked various warmwater fish species in area lakes; and equipment maintenance.

Education

IDAHO STATE UNIVERSITY, POCATELLO, IDAHO, 1982-1985
Master of Science Degree in Biology (Zoology emphasis), 1985
Thesis: Biotic Responses to Sediment Removal in a Tributary of Silver Creek, Idaho

SOUTH DAKOTA STATE UNIVERSITY, BROOKINGS, SOUTH DAKOTA, 1977-1981
Bachelor of Science Degree in Wildlife and Fisheries Sciences, 1981

professional certifications

Certified Fisheries Scientist, 1990 (American Fisheries Society)

professional training

- Electrofishing Techniques, Idaho Dept. of Fish and Game, May 1987
- Riparian Community Type Classification, Sawtooth National Forest, Summer 1987
- Stream/Riparian Management, Don Chapman Consultants, Nov 30-Dec. 4, 1987
- Underwater Observation, Benthological & Limnological Sampling, Physical Habitat Monitoring of Streams, Idaho Dept. Of Fish and Game, June 1988
- River Mechanics: Living with Fluvial Systems, Geomax, February 1989
- Redd Count Training, Idaho Department of Fish and Game, August 1989
- Hazardous Materials Assessment Training, EPA, March 21, 1990
- Hydrology and Hydraulics of Fisheries Projects, John Orsborne, March 5-6, 1991
- Lake Renovation Using Rotenone, Idaho Dept. of Fish and Game, May 8, 1991
- Forest Habitat Type Classification, Boise National Forest, June 22-24, 1993

references

Furnished Upon Request

publications

Reid, W., and others. 1998. Statewide Technical Assistance. Job Performance Report. Project FW-7-R-4. Idaho Department of Fish and Game, Boise, Idaho.

Reid, W., and others. 1997. Statewide Technical Assistance. Job Performance Report. Project FW-7-P-3. Idaho Department of Fish and Game, Boise, Idaho.

Reid, W., and others. 1995. Statewide Technical Assistance. Job Performance Report. Project FW-7-T-2. Idaho Department of Fish and Game, Boise, Idaho.

Reid, W., and others. 1995. Statewide Technical Assistance. Job Performance Report. Project FW-7-R-1. Idaho Department of Fish and Game, Boise, Idaho.

Reid, W., and others. 1994. Statewide Technical Assistance. Job Performance Report. Project F-82-T-4. Idaho Department of Fish and Game, Boise, Idaho.

This resume is submitted to offer evidence that Scott Grunder of the Idaho Department of Fish and Game is qualified to manage this project. Further assistance will be provided by IDFG personnel Tom Parker, State Wildlife Habitat Manager, and Dallas Burkhalter, Deputy Attorney General.

Section 10. Information/technology transfer

The results of long-term monitoring related to this project will be published in periodic reports. This information will be available to evaluate the effects of removing livestock grazing on riparian and aquatic habitats.

Congratulations!